



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/731,179

12/09/2003

Ashutosh K. Jha

NVDA P000861

4865

26291 7590 10/09/2007
PATTERSON & SHERIDAN L.L.P.
595 SHREWSBURY AVE, STE 100
FIRST FLOOR
SHREWSBURY, NJ 07702

EXAMINER

PATEL, HARESH N

ART UNIT

PAPER NUMBER

2154

MAIL DATE

DELIVERY MODE

10/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/731,179

Applicant(s)

JHA ET AL.

Examiner

Haresh Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9/16/04, 2/28/05, 1/31/07, 2/19/07, 9/11/07.

DETAILED ACTION

1. Claims 1-31 are subject to examination.

Priority

2. Applicant's claim for domestic priority, 60/476,570, under 35 U.S.C. 119(e) is acknowledged.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The present title, setting up a delegated TCP connection, is too broad and is not sufficient for proper classification of the claimed subject matter.

Drawings

4. The drawings are objected to because figures 10a and b require text labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the

Art Unit: 2154

remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121 (d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

5. An initialed and dated copy of the applicant's IDS form 1449, paper dated 9/16/04, 2/28/05, 1/31/07, 2/19/07 and 9/11/07, is attached to the instant Office action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-31 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-25 of copending Application No. 10/731,176.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application discloses all the limitations as disclosed such that the usage of determining, usage of delegated connection and usage of TCP is similar to the usage of determining, usage of offload unit related handling delegated connect and utilizing TCP. The claimed subject matter of claims of the copending application does not specifically mention about processing by hardware. However, the concept of using hardware for the processing is well known in the art; and it would be obvious to one of ordinary skill in the art to include the concept of using the hardware for the processing with the claimed subject matter of the claims copending application to facilitate handling communication over the connection.

This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

Claims 1-31 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-31 of copending Application No. 10/731,383.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application discloses all the limitations as disclosed such that the usage of determining, usage of delegated connection and usage of TCP is similar to the usage of determining, usage of offload unit related handling delegated connect and utilizing TCP. The claimed subject matter of claims of the copending application does not specifically mention about processing by hardware. However, the concept of using hardware for the processing is well known in the art; and it would be obvious to one of ordinary skill in the art

Art Unit: 2154

to include the concept of using the hardware for the processing with the claimed subject matter of the claims copending application to facilitate handling communication over the connection.

This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

Claims 1-31 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-28 of copending Application No. 10/731,602.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application discloses all the limitations as disclosed such that the usage of determining, usage of delegated connection and usage of TCP is similar to the usage of determining, usage of offload unit related handling delegated connect and utilizing TCP. The claimed subject matter of claims of the copending application does not specifically mention about processing by hardware. However, the concept of using hardware for the processing is well known in the art; and it would be obvious to one of ordinary skill in the art to include the concept of using the hardware for the processing with the claimed subject matter of the claims copending application to facilitate handling communication over the connection.

This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Aviani et al.

6,976,085, Cisco (Hereinafter Aviani-Cisco).

8. Referring to claim 1, Aviani-Cisco discloses a method of setting up a delegated connection (e.g., col., 9), the method comprising: establishing a TCP connection (e.g., col., 9); and determining whether or not to delegate the TCP connection for processing by hardware (e.g., col., 10).

9. Referring to claim 2, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses setting up an entry in a delegated connection table upon determining to delegate the TCP connection (e.g., col., 11).

10. Referring to claim 3, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses wherein the step of determining is based on at least one characteristic of the connection (e.g., col., 11).

11. Referring to claim 4, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses wherein the characteristic is a priority specified for the TCP connection (e.g., col., 11).

12. Referring to claim 5, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the at least one characteristic is a duration of the TCP connection (e.g., col., 11).

13. Referring to claim 6, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the at least one characteristic is a frame rate of the TCP connection (e.g., col., 12).

14. Referring to claim 7, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses transferring user buffer information for the delegated connection to the hardware (e.g., col., 13).

15. Referring to claim 8, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses receiving a frame for the delegated connection and determining a user buffer is available (e.g., col., 14).

16. Referring to claim 9, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses uploading a portion of the frame to a location specified in the user buffer information (e.g., col., 13).

Art Unit: 2154

17. Referring to claim 10, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses receiving a frame for the delegated connection and determining a user buffer is not available (e.g., col., 12).

18. Referring to claim 11, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses uploading a portion of the frame to a legacy buffer (e.g., col., 12).

19. Referring to claim 12, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses a system for setting up a delegated connection (e.g., col., 9), the system comprising: means for establishing a TCP connection (e.g., col., 9); and means for determining whether or not to delegate the TCP connection for processing by hardware (e.g., col., 10).

20. Referring to claim 13, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses means for setting up an entry in a delegated connection table (e.g., col., 11).

21. Referring to claim 14, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses means for transferring user buffer information for the delegated connection to the hardware (e.g., col., 12).

Art Unit: 2154

22. Referring to claim 15, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses means for determining a user buffer is available (e.g., col., 13).

23. Referring to claim 16, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses means for setting a maximum segment size (e.g., col., 12).

24. Referring to claim 17, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses means for enabling and disabling acknowledgement coalescing (e.g., col., 12).

25. Referring to claim 18, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses a system for setting up a delegated connection (e.g., col., 9), the system comprising: a CPU configured to execute an application program and a TCP Stack (e.g., col., 9), the TCP Stack configured to determine whether or not to delegate a TCP connection for processing by hardware (e.g., col., 10); and a system memory coupled to the CPU (e.g., col., 10).

26. Referring to claim 19, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein a first portion of the system memory stores at least one user buffer and a second portion of the system memory configured to store at least one legacy buffer (e.g., col., 11).

27. Referring to claim 20, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the TCP Stack provides the hardware with location information corresponding to the at least one user buffer (e.g., col., 12).

28. Referring to claim 21, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the location information includes a physical address (e.g., col., 12).

29. Referring to claim 22, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the location information includes a user buffer size (e.g., col., 13).

30. Referring to claim 23, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the first portion of the system memory is allocated to the application program (e.g., col., 12).

31. Referring to claim 24, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the second portion of the system memory is allocated to a software driver (e.g., col., 11).

Art Unit: 2154

32. Referring to claim 25, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses wherein the hardware is configured to process frames to produce payload data for the delegated connection set up by the TCP Stack (e.g., col., 13).

33. Referring to claim 26, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses wherein the hardware is configured to upload the payload data to one or more user buffers when user buffer location information is provided to the hardware by the application program and translated into physical address space by the TCP Stack (e.g., col., 15).

34. Referring to claim 27, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses wherein the hardware is configured to upload the payload data to a legacy buffer when user buffer location information is not provided to the hardware by the application program (e.g., col., 16).

35. Referring to claim 28, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses wherein the TCP Stack is configured to select a connection for delegation based on at least one connection characteristic (e.g., col., 12).

36. Referring to claim 29, Aviani-Cisco discloses the claimed limitations as rejected above. Aviani-Cisco also discloses wherein the at least one connection characteristic includes connection duration (e.g., col., 12).

Art Unit: 2154

37. Referring to claim 30, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the at least one connection characteristic includes connection frame rate (e.g., col., 13).

38. Referring to claim 31, Aviani-Cisco discloses the claimed limitations as rejected above.

Aviani-Cisco also discloses wherein the at least one connection characteristic includes a connection priority (e.g., col., 14).

39. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayes 2003/0158906 (Hereinafter Hayes).

40. Referring to claim 1, Hayes discloses a method of setting up a delegated connection (e.g., page 3), the method comprising: establishing a TCP connection (e.g., page 3); and determining whether or not to delegate the TCP connection for processing by hardware (e.g., page 3).

41. Referring to claim 2, Hayes discloses the claimed limitations as rejected above. Hayes also discloses setting up an entry in a delegated connection table upon determining to delegate the TCP connection (e.g., page 2).

42. Referring to claim 3, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the step of determining is based on at least one characteristic of the connection (e.g., page 3).

Art Unit: 2154

43. Referring to claim 4, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the characteristic is a priority specified for the TCP connection (e.g., page 4).

44. Referring to claim 5, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the at least one characteristic is a duration of the TCP connection (e.g., page 4).

45. Referring to claim 6, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the at least one characteristic is a frame rate of the TCP connection (e.g., page 5).

46. Referring to claim 7, Hayes discloses the claimed limitations as rejected above. Hayes also discloses transferring user buffer information for the delegated connection to the hardware (e.g., page 5).

47. Referring to claim 8, Hayes discloses the claimed limitations as rejected above. Hayes also discloses receiving a frame for the delegated connection and determining a user buffer is available (e.g., page 6).

48. Referring to claim 9, Hayes discloses the claimed limitations as rejected above. Hayes also discloses uploading a portion of the frame to a location specified in the user buffer information (e.g., page 5).

49. Referring to claim 10, Hayes discloses the claimed limitations as rejected above. Hayes also discloses receiving a frame for the delegated connection and determining a user buffer is not available (e.g., page 5).

50. Referring to claim 11, Hayes discloses the claimed limitations as rejected above. Hayes also discloses uploading a portion of the frame to a legacy buffer (e.g., page 6).

51. Referring to claim 12, Hayes discloses the claimed limitations as rejected above. Hayes also discloses a system for setting up a delegated connection (e.g., page 3), the system comprising: means for establishing a TCP connection (e.g., page 3); and means for determining whether or not to delegate the TCP connection for processing by hardware (e.g., page 2).

52. Referring to claim 13, Hayes discloses the claimed limitations as rejected above. Hayes also discloses means for setting up an entry in a delegated connection table (e.g., page 2).

53. Referring to claim 14, Hayes discloses the claimed limitations as rejected above. Hayes also discloses means for transferring user buffer information for the delegated connection to the hardware (e.g., page 4).

54. Referring to claim 15, Hayes discloses the claimed limitations as rejected above. Hayes also discloses means for determining a user buffer is available (e.g., page 5).

55. Referring to claim 16, Hayes discloses the claimed limitations as rejected above. Hayes also discloses means for setting a maximum segment size (e.g., page 5).

56. Referring to claim 17, Hayes discloses the claimed limitations as rejected above. Hayes also discloses means for enabling and disabling acknowledgement coalescing (e.g., page 5).

57. Referring to claim 18, Hayes discloses the claimed limitations as rejected above. Hayes also discloses a system for setting up a delegated connection (e.g., page 3), the system comprising: a CPU configured to execute an application program and a TCP Stack (e.g., page 3), the TCP Stack configured to determine whether or not to delegate a TCP connection for processing by hardware (e.g., page 2); and a system memory coupled to the CPU (e.g., page 2).

58. Referring to claim 19, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein a first portion of the system memory stores at least one user buffer and a second portion of the system memory configured to store at least one legacy buffer (e.g., page 5).

59. Referring to claim 20, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the TCP Stack provides the hardware with location information corresponding to the at least one user buffer (e.g., page 5).

60. Referring to claim 21, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the location information includes a physical address (e.g., page 5).

61. Referring to claim 22, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the location information includes a user buffer size (e.g., page 6).

62. Referring to claim 23, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the first portion of the system memory is allocated to the application program (e.g., page 6).

63. Referring to claim 24, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the second portion of the system memory is allocated to a software driver (e.g., page 3).

64. Referring to claim 25, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the hardware is configured to process frames to produce payload data for the delegated connection set up by the TCP Stack (e.g., page 4).

65. Referring to claim 26, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the hardware is configured to upload the payload data to one or more user buffers when user buffer location information is provided to the hardware by the application program and translated into physical address space by the TCP Stack (e.g., page 5).

66. Referring to claim 27, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the hardware is configured to upload the payload data to a legacy buffer when user buffer location information is not provided to the hardware by the application program (e.g., page 6).

67. Referring to claim 28, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the TCP Stack is configured to select a connection for delegation based on at least one connection characteristic (e.g., page 5).

68. Referring to claim 29, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the at least one connection characteristic includes connection duration. (e.g., page 5)

69. Referring to claim 30, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the at least one connection characteristic includes connection frame rate (e.g., page 4).

70. Referring to claim 31, Hayes discloses the claimed limitations as rejected above. Hayes also discloses wherein the at least one connection characteristic includes a connection priority (e.g., page 5).

71. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Levy-Abegnoli et al. 7,272,653, IBM (Hereinafter Levy-Abegnoli-IBM).

72. Referring to claim 1, Levy-Abegnoli-IBM discloses a method of setting up a delegated connection (e.g., col., 3), the method comprising: establishing a TCP connection (e.g., col., 3); and determining whether or not to delegate the TCP connection for processing by hardware (e.g., col., 4).

73. Referring to claim 2, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses setting up an entry in a delegated connection table upon determining to delegate the TCP connection (e.g., col., 4).

74. Referring to claim 3, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the step of determining is based on at least one characteristic of the connection (e.g., col., 4).

75. Referring to claim 4, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the characteristic is a priority specified for the TCP connection (e.g., col., 4).

76. Referring to claim 5, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the at least one characteristic is a duration of the TCP connection (e.g., col., 4).

77. Referring to claim 6, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the at least one characteristic is a frame rate of the TCP connection (e.g., col., 5).

78. Referring to claim 7, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses transferring user buffer information for the delegated connection to the hardware (e.g., col., 6).

79. Referring to claim 8, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses receiving a frame for the delegated connection and determining a user buffer is available (e.g., col., 6).

80. Referring to claim 9, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses uploading a portion of the frame to a location specified in the user buffer information (e.g., col., 6).

81. Referring to claim 10, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses receiving a frame for the delegated connection and determining a user buffer is not available (e.g., col., 5).

82. Referring to claim 11, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses uploading a portion of the frame to a legacy buffer (e.g., col., 5).

83. Referring to claim 12, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses a system for setting up a delegated connection (e.g., col., 3), the system comprising: means for establishing a TCP connection (e.g., col., 3); and means for determining whether or not to delegate the TCP connection for processing by hardware (e.g., col., 4).

84. Referring to claim 13, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses means for setting up an entry in a delegated connection table (e.g., col., 4).

85. Referring to claim 14, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses means for transferring user buffer information for the delegated connection to the hardware (e.g., col., 5).

86. Referring to claim 15, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses means for determining a user buffer is available (e.g., col., 6).

87. Referring to claim 16, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses means for setting a maximum segment size (e.g., col., 5).

88. Referring to claim 17, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses means for enabling and disabling acknowledgement coalescing (e.g., col., 5).

89. Referring to claim 18, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses a system for setting up a delegated connection (e.g., col., 3), the system comprising: a CPU configured to execute an application program and a TCP Stack (e.g., col., 3), the TCP Stack configured to determine whether or not to delegate a TCP connection for processing by hardware (e.g., col., 4); and a system memory coupled to the CPU (e.g., col., 4).

90. Referring to claim 19, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein a first portion of the system memory stores at

least one user buffer and a second portion of the system memory configured to store at least one legacy buffer (e.g., col., 4).

91. Referring to claim 20, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the TCP Stack provides the hardware with location information corresponding to the at least one user buffer (e.g., col., 5).

92. Referring to claim 21, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the location information includes a physical address (e.g., col., 5).

93. Referring to claim 22, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the location information includes a user buffer size (e.g., col., 6).

94. Referring to claim 23, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the first portion of the system memory is allocated to the application program (e.g., col., 5).

95. Referring to claim 24, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the second portion of the system memory is allocated to a software driver (e.g., col., 4).

96. Referring to claim 25, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the hardware is configured to process frames to produce payload data for the delegated connection set up by the TCP Stack (e.g., col., 6).

97. Referring to claim 26, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the hardware is configured to upload the payload data to one or more user buffers when user buffer location information is provided to the hardware by the application program and translated into physical address space by the TCP Stack (e.g., col., 7).

98. Referring to claim 27, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the hardware is configured to upload the payload data to a legacy buffer when user buffer location information is not provided to the hardware by the application program (e.g., col., 7).

99. Referring to claim 28, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the TCP Stack is configured to select a connection for delegation based on at least one connection characteristic (e.g., col., 5).

Art Unit: 2154

100. Referring to claim 29, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the at least one connection characteristic includes connection duration (e.g., col., 5).

101. Referring to claim 30, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the at least one connection characteristic includes connection frame rate (e.g., col., 6).

102. Referring to claim 31, Levy-Abegnoli-IBM discloses the claimed limitations as rejected above. Levy-Abegnoli-IBM also discloses wherein the at least one connection characteristic includes a connection priority (e.g., col., 6).

Conclusion

Multiple references are used for the rejections to demonstrate that several references disclose the broadly claimed subject matter of the claims.

Examiner has cited particular columns and line numbers and/or paragraphs and/or sections and/or page numbers in the reference(s) as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety, as potentially teaching, all or part of the

Art Unit: 2154

claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Haresh Patel

Haresh Patel

September 27, 2007